INCH-POUND

MIL-C-11272/4C
7 February 2003
SUPERSEDING
MIL-C-11272/4B
7 January 1970

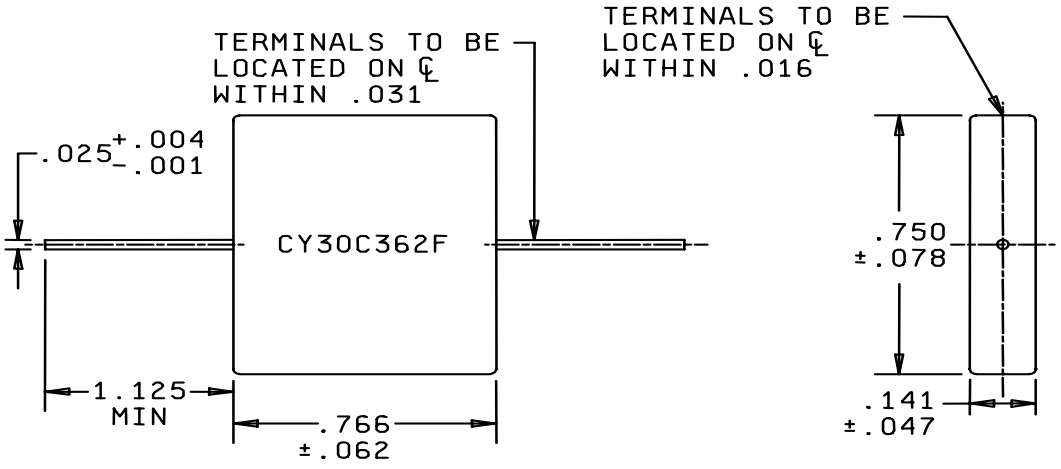
MILITARY SPECIFICATION

CAPACITORS, FIXED, GLASS DIELECTRIC

STYLE CY30

This specification is approved for use by all Departments and Agencies of the Department of Defense.

INACTIVE FOR DESIGN AFTER 7 JAN 1970. USE MIL-PRF-23269.



Inches	mm
.001	.03
.004	.10
.025	.64
.031	.79
.047	1.19
.062	1.57
.078	1.98
.141	3.58
.750	19.05
.766	19.46
1.125	28.58

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.

Style CY30 capacitors.

REQUIREMENTS:

Requirements: Requirements shall be in accordance with MIL-C-11272, and as specified herein.

Design and construction: Capacitors shall be of the design, construction, and physical dimensions specified on figure 1 and in table I.

TABLE I. Style CY30.

Pin 1/	Capacitance	DC rated voltage	Capacitance tolerances available
	pF	volts	
CY30C362-	3,600	500	FGJ
CY30C392-	3,900	500	FGJ
CY30C432-	4,300	500	FGJ
CY30C472-	4,700	500	FGJ
CY30C512-	5,100	500	FGJ
CY30C562-	5,600	500	FGJ
CY30C622-	6,200	500	FGJ
CY30C682-	6,800	300	FGJ
CY30C752-	7,500	300	FGJ
CY30C822-	8,200	300	FGJ
CY30C912-	9,100	300	FGJ
CY30C103-	10,000	300	FGJ

1/ Complete type designation will include an additional letter symbol to indicate capacitance tolerance, where applicable.

Capacitance: See table I.

Capacitance tolerance: C: ± 0.25 pF, D: ± 0.50 pF, F: 1%, G: 2%, J: 5%.

DC rated voltage: 300 and 500 volts.

Temperature range: -55°C to +125°C.

Life: 150 percent dc rated voltage at 125°C +4°C, -0°C for 2,000 hours.

Group A test: 250 hours, group B continuation test for 1,750 hours.

Qualification inspection: Capacitors shall meet the following requirements, as applicable:

For qualification test:

At 25°C:

Insulation resistance: 100,000 megohms minimum.

Capacitance: Change not more than 0.5 percent of nominal value or 0.5 pF whichever is greater, from initial 125°C value.

Dissipation factor: Not to exceed 0.0025.

At 125°C:

Insulation resistance: Not less than 10,000 megohms.

Capacitance: Change not more than 0.5 percent of nominal value or 0.5 pF whichever is greater, from initial 125°C value.

Dissipation factor: Not to exceed 0.007.

Performance check: Capacitors shall meet the following requirements:

For performance check:

Insulation resistance: 100,000 megohms minimum.

Capacitance: Change not more than 0.5 percent of nominal value or 0.5 pF whichever is greater, from initial 125°C value.

Dissipation factor: Not to exceed 0.0025.

Temperature coefficient and capacitance drift: The temperature coefficient and capacitance drift shall be within the limits specified in table II.

TABLE II. Temperature coefficient and capacitance drift.

Temperature coefficient	Capacitance drift (-55° to +125°C)
parts/million/°C 140 ±25	0.1 percent or 0.1 pF, whichever is greater.

VERIFICATION:

Sampling and inspection shall be in accordance with MIL-C-11272.

Group A inspection: See MIL-C-11272: Successful performance of group A inspection.

Group B inspection: See MIL-C-11272: Successful performance of group B inspection.

Qualification: With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in the applicable Qualified Products List whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from Defense Supply Center Columbus, P. O. Box 3990, Columbus OH 43216-5000.

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Review activities:)
Army - MI
Air Force - 99
DLA - IS

Preparing activity:
DLA - CC

(Project 5910-2163-04)